

CLAIM AMENDMENTS

1. (Currently Amended) A medical method performed on a patient, comprising:
intravascularly delivering a first electrical lead within the head of the patient;
non-vascularly delivering a second electrical lead within the head of the patient;
placing the first and second leads electrical lead adjacent a first brain tissue region;
placing the second electrical lead adjacent a second brain tissue region;
stimulating the first brain tissue region with one of the first electrical lead and the
second electrical lead to treat a neurological disorder of the patient; and
recording brain signals at the second brain tissue region with another of the first
electrical lead and the second electrical lead to monitor the neurological disorder.
2. (Cancelled).
3. (Currently Amended) The method of claim 2 1, wherein the neurological disorder
is a degenerative disorder.
4. (Withdrawn-Currently Amended) The method of claim 2 1, wherein the
neurological disorder is a brain infarction.
5. (Cancelled).
6. (Withdrawn) The method of claim 1, wherein the first electrical lead is introduced
into the head via the circulatory system.
7. (Original) The method of claim 1, wherein the first electrical lead is introduced
into the head via the ventricular system.

8. (Original) The method of claim 1, wherein the first electrical lead is placed in direct contact with the brain tissue.

9. (Withdrawn) The method of claim 1, wherein the first electrical lead is placed in indirect contact with the brain tissue.

10. (Withdrawn) The method of claim 1, wherein the first electrical lead is placed adjacent cortical brain tissue, and the second electrical lead is placed adjacent deep brain tissue.

11. (Original) The method of claim 1, wherein the first electrical lead is placed adjacent deep brain tissue, and the second electrical lead is placed adjacent cortical brain tissue.

12-13. (Cancelled).

14. (Withdrawn-Currently Amended) The method of claim 1, further comprising: electrically connecting the one of the first electrical lead[s] and the second electrical lead to one or more of a stimulation source; and
electrically connecting the other of the first electrical lead and the second electrical lead with a recorder.

15. (Currently Amended) The method of claim 14, further comprising implanting the one or more stimulation source and the recorder within the patient.

16. (Currently Amended) A medical method performed on a patient, comprising: delivering a first electrical lead within the head of the patient via a blood vessel;

delivering a second electrical lead within the head of the patient via an opening in an cranium of the patient; and

placing the first and second leads electrical lead adjacent a first brain tissue region;

placing the second electrical lead adjacent a second brain tissue region;

stimulating the first brain tissue region with one of the first electrical lead and the second electrical lead to treat a neurological disorder of the patient; and

recording brain signals at the second brain tissue region with another of the first electrical lead and the second electrical lead to monitor the neurological disorder.

17. (Cancelled).

18. (Currently Amended) The method of claim 17 16, wherein the neurological disorder is a degenerative disorder.

19. (Withdrawn-Currently Amended) The method of claim 17 16, wherein the neurological disorder is a brain infarction.

20. (Cancelled).

21. (Withdrawn) The method of claim 16, wherein the first electrical lead is introduced into the head via the circulatory system.

22. (Original) The method of claim 16, wherein the first electrical lead is introduced into the head via the ventricular system.

23. (Original) The method of claim 16, wherein the first electrical lead is placed in direct contact with the brain tissue.

24. (Withdrawn) The method of claim 16, wherein the first electrical lead is placed in indirect contact with the brain tissue.

25. (Withdrawn) The method of claim 16, wherein the first electrical lead is placed adjacent cortical brain tissue, and the second electrical lead is placed adjacent deep brain tissue.

26. (Original) The method of claim 16, wherein the first electrical lead is placed adjacent deep brain tissue, and the second electrical lead is placed adjacent cortical brain tissue.

27-28. (Cancelled).

29. (Currently Amended) The method of claim 16, further comprising;
electrically connecting the one of the first electrical lead[s] and the second electrical lead to one or more of a stimulation source; and
electrically connecting the other of the first electrical lead and the second electrical lead with a recorder.

30. (Currently Amended) The method of claim 29, further comprising implanting the one or more stimulation source and the recorder within the patient.

31. (New) The method of claim 1, wherein the one of the first electrical lead and the second electrical lead is the second electrical lead, and the other of the first electrical lead and the second electrical lead is the first electrical lead.

32. (New) The method of claim 31, wherein the first electrical lead records the brain signals from within the sagittal sinus of the patient.

33. (New) The method of claim 1, wherein the neurological disorder is epilepsy.
34. (New) The method of claim 1, wherein the brain signals recorded at the first brain tissue region by the other of the first electrical lead and the second electrical lead indicate the onset of a seizure, and the one of the first electrical lead and the second electrical lead stimulates the first brain tissue region to stop the seizure.
35. (New) The method of claim 16, wherein the one of the first electrical lead and the second electrical lead is the second electrical lead, and the other of the first electrical lead and the second electrical lead is the first electrical lead.
36. (New) The method of claim 35, wherein the first electrical lead records the brain signals from within the sagittal sinus of the patient.
37. (New) The method of claim 16, wherein the neurological disorder is epilepsy.
38. (New) The method of claim 16, wherein the brain signals recorded at the first brain tissue region by the other of the first electrical lead and the second electrical lead indicate the onset of a seizure, and the one of the first electrical lead and the second electrical lead stimulates the first brain tissue region to stop the seizure.